Featured Member: Brian Nord

Dr. Brian D. Nord, a postdoctoral research associate at Fermilab, is a significant contributor to science education. Arriving at Fermilab in 2012 after completing his doctoral studies at the University of Michigan, this young astrophysicist shares his passion for his profession through a variety of ventures designed to educate through entertainment. One of his most recent contributions includes CNN. (No, not the news channel.) This is *Cosmic Nightly News* (CNN). A segment of this innovative and highly entertaining venue is available as a YouTube video from Physics Slam 2013. Science education via *The Colbert Report* format? Why not? Check it out and see for yourself why Brian, cast as a cosmic newscaster of the future, won Physics Slam 2013.

Physics Slam 2013: https://www.youtube.com/watch?v=2D94uuRKTOw#t=3051
Fermilab's second annual Physics Slam, held on November 15, 2013, featured five physicists vying to explain their area of study in the most entertaining way possible. Click the link to see Dr. Nord's *Cosmic Nightly News* segment.

Additionally, Brian is integrally involved with the Dark Energy Survey (DES) and strives to tell the stories unfolding throughout our universe via the blog, *Dark Energy Detectives*, for which he writes and edits.

Dark Energy Detectives: darkenergydetectives.org

Some early results from DES include:

- Observation of super luminous supernovae.
- Discovery of strong gravitational lenses.
- Measurements of gravitational lensing throughout the universe.
- Observations of distant galaxy clusters.

DES is nearing the end of a second year of science observations. Seasons go August to February each year during the Chilean summer. Brian speaks with excitement as he describes such strange phenomena in the universe as extraordinarily bright supernovae and speculation about how dark energy works. What does it say about what we believe we already know?

Brian recalls the influence of his Milwaukee high school teachers as he chose his path. Originally interested in string theory, his later fascination with astrophysics prevailed. This passion is complemented by his love of English. His high school English teacher launched him into a study of patterns of light in literature. This topic engaged and delighted Brian, known as "The Philosopher" by his teachers. It is not surprising that writing about physics topics comes so naturally to him.

Brian's genius lies in the presentation. Once naïvely believing that physics could answer all fundamental questions, he relishes in the reality that more and more questions bombard us. Through his creative side, Brian presents physics topics in an engaging, informative and entertaining format appealing to students and other scientists alike. Outreach is an important

aspect of Brian's work as evidenced by his role as co-chairman of the DES Education and Public Outreach Committee.

Brian is also cognizant of his place in the universe. While we may be rare and special, we are part and parcel of the universe as a whole. Brian reminds himself that he is the representation of the universe, as are we all. "I am made of the same stuff, yet I am studying it." How cool is that?

Dr. Nord recommends viewing https://www.youtube.com/watch?v=9D05ej8u-gU. Titled *The Most Astounding Fact*, this video presents a compelling perspective, which speaks to his own view of the universe. It's a **must see**!

Brian submitted a grant proposal to APS Physics last fall for funding of more CNN episodes. If the grant materializes and new episodes are created, these segments will enhance FFSE programs such as Beauty and Charm, QuarkNet, Summer Science Institutes and even the Family Open House. The winners will be announced in February. Good luck, Brian, and thank you for your membership in FFSE!